

CLAIMS

1. Front unit (1) for a motor vehicle, of the type comprising:

5 - at least one optical unit (2) which comprises a casing (7) provided with inlet and outlet openings (12, 13) for a flow of air (23; 33) sweeping the inside of the casing,

- a heat exchanger (3), and

10 - a fan (4) for producing an airstream (21) passing through the heat exchanger,

characterized in that the front unit comprises a duct (15), a first end (16) of which is connected to an opening (12) in the casing (7) of the optical unit
15 (2) and a second end (19) of which is arranged in the vicinity of the fan (4) so that the fan produces the flow of air for sweeping the inside of the casing (7), and in that it comprises a shroud (14) for channelling the airstream between the fan (4) and the heat
20 exchanger (3), the second end of the duct (15) being connected to the shroud.

2. Front unit according to claim 1, characterized in that it comprises a Venturi device (29) which is
25 arranged in the vicinity of the fan (4) and which comprises a divergent main passage (30) and an auxiliary passage (31) connecting the main passage and the second end of the duct (15).

30 3. Front unit according to claim 2, characterized in that the shroud (14) forms the main passage (30) of the Venturi device (29).

4. Front unit according to claim 2, characterized in that the main passage (30) diverges in the direction of circulation of the airstream (21) in order to bring about the suction, by way of the second end (19) of the duct, of the flow of air for sweeping the inside of the casing.

5. Front unit according to claim 3, characterized in that the main passage (30) diverges in the direction of circulation of the airstream (21) in order to bring about the suction, by way of the second end (19) of the duct, of the flow of air for sweeping the inside of the casing.

6. Front unit according to claim 1, characterized in that the fan (4) is to be located behind the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

7. Front unit according to claim 2, characterized in that the fan (4) is to be located behind the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

8. Front unit according to claim 3, characterized in that the fan (4) is to be located behind the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

9. Front unit according to claim 4, characterized in that the fan (4) is to be located behind the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

10. Front unit according to claim 1, characterized in that the fan (4) is to be located in front of the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

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11. Front unit according to claim 2, characterized in that the fan (4) is to be located in front of the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

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12. Front unit according to claim 3, characterized in that the fan (4) is to be located in front of the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

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13. Front unit according to claim 4, characterized in that the fan (4) is to be located in front of the heat exchanger (3) when the front unit (1) is mounted on the motor vehicle.

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14. Motor vehicle, characterized in that it includes a front unit according to claim 1.

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15. Motor vehicle, characterized in that it includes a front unit according to claim 2.

16. Motor vehicle, characterized in that it includes a front unit according to claim 3.

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17. Motor vehicle, characterized in that it includes a front unit according to claim 4.

18. Motor vehicle, characterized in that it includes a front unit according to claim 6.

19. Motor vehicle, characterized in that it includes
5 a front unit according to claim 10.